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EXAMINER

RAEVIS, ROBERT R

ART UNIT

PAPER NUMBER

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

In response to applicant's telephonic inquiry regarding the last Office action, the following corrective action is taken.

The period for reply of 2 MONTHS set in said Office Action is restarted to begin with the mailing date of this letter.

Claims 8,10-14,18-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As to claim 11, where is there support for the "inversely **proportional**" (highlighting added) relationship? (Note:  $Y=1/X$  is an indication of an inversely **proportional** relationship or Y to X. Applicant does not have support for that relationship.) There is no support for any proportionality as claimed. Where is there any proportional teaching in the argued Para 17? Para 17 provides for only two points that may or may not be proportionally related.

As to claim 11, where is there support for the "inversely" relationship? Presently, Para 17 simply says that when the predetermined number of turns is high, that the pressure is then low; and that when the predetermined number of turns is low, that the pressure is high. That does not provide for an inverse relationship. All that states is that at some predetermined number of rotations, that the pressure changes from low to high. There is not support for any inverse relationship. This is only support for two

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different groups (one above, the other below the predetermined number), but no relationship between the points within either of the two groups.

Para 16.1 is new matter to the extent of "inversely related".

As to claim 8, where is there support for "determining the endurance of the optical disc based on a jitter value of 10%"? Please note that the single horizontal dashed line in Figure 6 does not seem related to failure, as suggested on p. 7 of REMARKS. That single line is just there in Figure 6.

Claims 8,10-14,18-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As to claim 8 "jitter value" is undefined. In particular, Applicant's provided definition of "jitter" (p. 7 of REMARK) relate a "jitter value" variations in the *duration* of any specified, related *interval*"(italics added). Does this mean that a "jitter" is a measure of time? If so, how is the period of time defined such that the claimed 10% may have meaning? If it's not time, but is a variation of a physical parameter, what parameter might that be? It may be beneficial for Applicant to provide a copy (i.e. reference) for his definition. A photocopy from his dictionary would do. What is the relationship between determination of endurance and jitter? What is physically measurable such that the "10%" value can be measured and recognized to provide for an indication of

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failure (as argued on p. 7 of REMARKS). Undersigned recognizes the term "jitter" in Para 154 of Hayashida, but the term is not explained there.

As to claim 18, "symbol error rate" is undefined. How is this used to determine endurance?

As to claim 19, "bit error rate" is undefined. How is this used to determine endurance?

As to claim 20, "servo error signal" is undefined. How is this used to determine endurance?

As to claim 21, "tracking error signal" is undefined. How is this used to determine endurance?

Claims 8,10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayashida et al.

As to claim 8, Hayashida et al teach (Para 91) a method to test endurance of an optical disc, including: placing the disc on a turntable; rotating the turntable and disc; applying pressure to the disc using a scratching unit (abrasive wheels) while the disc rotates a number of turns, so as to scratch the surface of the disc; and ascertaining the abrasion resistance of the sample, said resistance indicative of endurance. Force applied to the disc from above employs a pressure that is applied in the vertical direction. Jitter less than 10% is in the "satisfactory range" (Para 153).

Hayashida does not refer to "up to five" rotation turns.

As to claim 8, it would have been obvious to employ up to five rotation turns as TABLE 3 illustrates use of 5 abrasion cycles, while relating the cycles to the "rotating the turntable" (Para 91), suggestive of turning the specimen of interest 5 rotations during testing.

Hayashida refers (Para 91) to a range of cycles under a range of loads, but does not base one (loads) on the other (cycles).

As to claim 10, it would have been obvious to apply a reduced load for a greater number of cycles as it would be desirable to assure that the wheels do not fully pass through the disc of interested, to thus permit for a measurement of a parameter (i.e. the change of thickness" (Para 94)) that's indicative of abrasion resistance.

As to claim 11, one of ordinary skill would be inclined to try a greater force (i.e. double) and reduced number of turns (by half) to produce a test that may be completed over a shorter time, necessarily employing a proportional relation.

As to claim 12,13, it would have been obvious to employ a non-rotating test piece (in place of a wheel) in Hayashida as Hayashida teaches (Para 90,92) that steel wool may effectively permit for abrasion testing of a rotating body. Such a test piece must provide for a sufficient force/area ration to provide for a measure of abrasion. The pressure provided in Applicant's claim 12 is within the range of sufficient pressures, especially as Nakagawa's test piece is non-rotating, just like Applicant's.

As to claim 14, Hayashida suggests (Para 94) depth measurement as a means to evaluate abrasion resistance. In addition, one of ordinary skill would provide for

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reference values indicative of whether resistance for a particular disc is acceptable.

The threshold value provided in Applicant's claim 14 seems to be within one of ordinary skill.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert R. Raevis whose telephone number is 571-272-2204. The examiner can normally be reached on Monday to Friday from 5:30am to 3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams, can be reached on 571-272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



RAEVIS